



Lasting Impression: Transformational Leadership and Family Supportive Supervision as Resources for Well-Being and Performance

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Received: 17 November 2017 / Accepted: 13 February 2018 / Published online: 8 March 2018
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Abstract Although evidence is growing in the occupational health field that supervisors are a critical influence on subordinates' reports of family supportive supervisor behaviors (FSSB), our understanding is limited regarding the antecedents of employee's FSSB perceptions and their lagged effects on future health and work outcomes. Drawing on a positive job resource perspective, we argue that supervisors who

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report that they use transformational leadership (TL) styles are more likely to have subordinates with higher FSSB perceptions. We theorize that these enhanced perceptions of work-family specific support increase access to personal and social resources (objectively and subjectively) that buffer work-nonwork demands and enhance health (mental, physical) and job outcomes (performance appraisal ratings, job satisfaction, turnover intentions, work-family conflict). Time-lagged multi-source survey data collected in a field study from retail employees and their supervisors and archival performance ratings data collected a year later support our proposed relationships (with the exception that for health, only mental health and not physical health was significant). Post hoc analyses showed that employees' FSSB perceptions play a mediating role between supervisor TL and job satisfaction and work-family conflict, but no other outcomes studied. Overall, this study answers calls in the occupational health literature to use stronger designs to determine linkages between leadership-related workplace phenomena as antecedents of health, work-family, and job outcomes. Our results demonstrate that employees with supervisors who report that they use transformational leadership styles are more likely to perceive higher levels of family supportive supervision, which are positive job resources that enhance occupational health.

Keywords Mental health · Family supportive supervisor behaviors · Performance · Leadership · Work-family

Research shows that leadership perceptions and leader behaviors play an important role in employee work-family support, health, and productivity (Hammer et al. 2011; Tepper 2000). Yet reviews call for more rigorous and richer occupational health research to determine linkages between leadership and health and job outcomes (Arnold 2017). Transformational leadership and family supportive supervision are growing streams of occupational health research (Kelloway et al. 2012; Kossek et al. 2011) relevant to these relationships that are not well integrated. Both areas highlight the importance of supervisors as a positive work environment resource for employee health and work effectiveness (Arnold 2017). Transformational leaders create empowering job conditions that increase employee access to social and personal resources (e.g., support and autonomy) and this leadership style is associated with lower burnout, stress, and turnover (Arnold 2017; Lorinkova and Perry 2017). Similarly, family supportive supervisor behaviors (FSSB) are contextual resources that help buffer individuals from stress by fostering positive emotions, increased energy, and access to work-life formal and informal supports (Ten Brummelhuis and Bakker 2012). Perceptions of family supportive supervisor behaviors relate to well-being, reduced work-family interference (Goh et al. 2015); lower turnover intentions (Hammer et al.

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2011), higher organizational citizenship behaviors (Hammer et al. 2016) and work-family balance (Greenhaus et al. 2012).

Yet rigorous research (a) is lacking regarding how supervisors' leadership styles relate to FSSB, and (b) overlooks FSSB as an antecedent predicting future mental health or performance for employees. These are important gaps to examine in order to better understand the occupational health effects of leadership style and work-family behaviors. While many studies note positive work outcomes from family supportive supervision, most research is based on cross-sectional designs or longitudinal intervention-based designs where FSSB has mainly been found to be a moderator of intervention effectiveness (Hammer et al. 2011). Thus, its predictors have not been strongly examined.

The goal of the current research is to examine relationships between transformational leadership, FSSB, and employee health, work-family, and job outcomes. We rely on time-lagged randomized multi-level data collected at two time points from hourly employees and supervisors in twelve retail worksites. Our study fills key gaps by (a) examining antecedents of FSSB; (b) addressing calls for scholars to use more multi-source, multi-method time-lagged work-family research designs; (c) linking FSSB to actual HR data—namely performance appraisal ratings; and (d) researching understudied populations (retail workers).

Retail organizations are an important generalizable context, as the service sector is growing and provides key entry access to labor markets (U.S. Bureau of Labor Statistics 2016). It is also under increasing economic pressures due to major industry transformation of the brick and mortar retail job settings (where many low-income workers are employed) with competitive threats from internet retailers. Further, many U.S. employers limit retail workers' hours to just under what would be considered necessary to access "full time" formal health care and work-family benefits. Thus, *informal* supervisor support (Kossek et al. 2011) is critical for health and job outcomes in this context. Given the importance of connecting leadership and FSSB as occupational health workplace resources, below we review the few studies that connect leadership, FSSB, health, and performance.

Theoretical Background

Although supervisors play a critical role in providing work-family support to subordinates, the relationship between supervisors' leadership approach and subordinate perceptions of family supportive supervisor behaviors is not well understood. Yet research on psychosocial work environments and occupational health (Hobfoll 1989, 2002; Johnson and Hall 1996) suggests that supervisors' leadership styles are likely to influence work-family support and have implications for employee health, performance, and well-being. As our multi-stage model in Fig. 1 shows, we argue that supervisors adopting a transformational leadership style are more likely to exhibit FSSB. In line with the work-home resources model (Ten Brummelhuis and Bakker 2012), we argue that FSSB represents a contextual resource whereby supervisors adopting a transformational leadership style provide different types of social support to help their subordinates meet their work and nonwork-related needs. Supervisors can be conceptualized as a key component of the work environment in which employees are embedded, providing job resources which spillover into the nonwork sphere that

buffer stress and demands. As a work-based contextual resource, FSSB has important effects on employee health and job outcomes.

Transformational Leadership and FSSB: A Resource Perspective

The transformational leadership literature suggests that when leaders engage in positive behavior patterns such as providing intellectual stimulation, inspiration about work, and expressing genuine concern about individual employees' needs, leaders create positive work conditions that enhance employees' beliefs in their own abilities and motivate them to higher levels of performance and well-being (Arnold et al. 2015). Transformational leaders remind employees their work is meaningful, foster positive emotions, enhance work engagement, and provide role modeling, coaching, and mentoring (Arnold et al. 2007). Occupational health reviews suggest that such leaders create a positive, psychologically supportive, healthy work environment (Arnold 2017) that fosters well-being while reducing stress, negative job rumination, and work-family conflict. Exposure to transformational leaders increases followers' enthusiasm, energy, and commitment, leading to extra effort and higher performance (Bass 1985).

Family supportive supervisor behaviors (FSSB) are defined as behaviors exhibited by supervisors that are supportive of employee family and personal roles (Hammer et al. 2009). Examples include emotional support, such as showing empathy; instrumental support, such as facilitating requested time off; role modeling, such as leaders demonstrating taking time off to care for themselves and their families; and creative work-family management, such as identifying ways that supporting employee's personal needs can jointly benefit both the employee and the employer. Although general supervisor social support exerts positive effects on many employee attitudes and behaviors from intention to turnover to work-family conflict, FSSB not only adds incremental variance but exerts stronger effects on attitudes and behaviors spilling over from the work to family sphere (Hammer et al. 2009; Kossek et al. 2011). In line with the work-home resources model (Ten Brummelhuis and Bakker 2012), previous studies

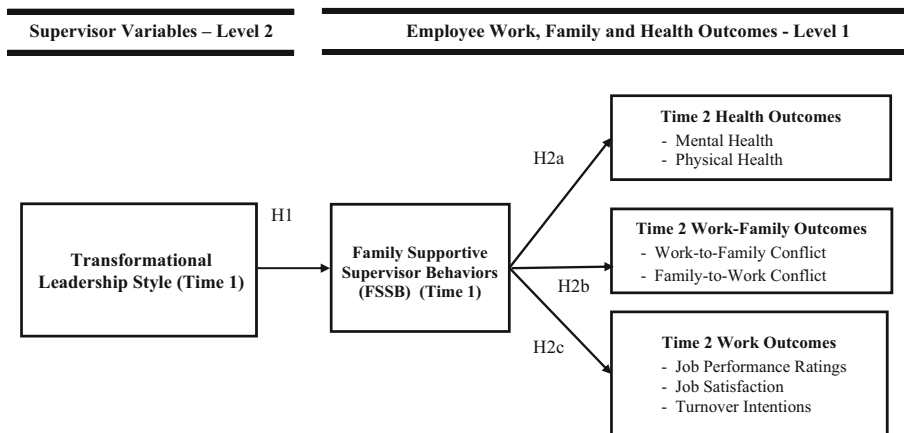


Fig. 1 Lagged relationships between transformational leadership style, family supportive supervision, and employee health, work-family, and job outcomes

conceptualize FSSB as a contextual resource where supervisors can provide both practical and emotional aid in terms of helping their subordinates manage their lives outside of work (Ten Brummelhuis and Bakker 2012; Paustian-Underdahl and Halbesleben 2014; Ferguson et al. 2015).

We add to this perspective by suggesting that there is a link between transformational leadership behaviors and FSSB—namely that FSSB is a contextual resource located in the objective or psychosocial work environment (Ten Brummelhuis and Bakker 2012). On the one hand, this linkage might be objective, whereby transformational leaders provide more FSSB compared to those who adopt other leadership styles. Research connecting leadership and resource-based theoretical perspectives suggests that positive leadership styles – including transformational leadership – are effective for generating resources for subordinates (e.g., Braun and Peus 2016; Breevaart et al. 2014). In other words, FSSB might co-occur with transformational leadership styles because the qualities of the transformational leader inspire actions consistent with family supportive supervision. On the other hand, this linkage may be subjective, where transformational leaders can enhance employees' perceptions of FSSB even if the supervisor does not engage in these specific behaviors. For example, supervisors engaging in transformational leadership styles can stimulate followers to “think and act on their own decisions,” including the ways in which they manage work and nonwork boundaries (Breevaart et al. 2014, p. 141; Ferguson et al. 2015). Thus, subordinates' perceptions of FSSB might be attributable to the overall transformational leadership style of their supervisor.

Subordinates with leaders who display transformational leadership behaviors are more likely to experience family supportive behaviors which act as a resource for them in managing conflicts between the work and nonwork spheres. For example, leaders who use inspiration to motivate others are likely to be seen as trustworthy, achieving a high quality vision, and serving as a charismatic role model (Bass and Avolio 1997) – all key attributes likely to inspire beliefs that the leader supports subordinates' personal needs including those related to the work-nonwork interface (Stavrou and Ierodiakonou 2016). Transformational leaders are often perceived as genuine and authentic which allows them to create an inclusive and psychologically safe workplace, including the ability to support individuals with different types of dependent caregiving demands (elder, child, sandwiched) (Kossek et al. 2017a). By engaging in role modeling behaviors associated with demonstrating how to achieve a work-family balance, transformational leaders will signal to their subordinates that it is appropriate to deal with family responsibilities when necessary and can alleviate the potential for fear of repercussions (Koch and Binnewies 2015). Further, leaders who provide individualized consideration by offering distinct patterns of support tailored to the needs of each employee are more likely to be seen as family supportive. They are also more likely to give employees' discretion to control how work is done, which is linked to reduced work-family conflict (Hammond et al. 2015).

These job resources are particularly valuable in influencing work-family, health, and job outcomes in the lives of all workers but especially for the lower wage, hourly workers we examined. Compared to professionals, hourly workers often lack access to many formal health and work-family policies that are typically studied in work-family research (e.g., telework, paid family leaves; family health care benefits). We argue that these workers who have exposure to transformational leaders have additional

psychosocial resources that enable them to better manage work and nonwork demands, see their bosses as providing more FSSB, and thrive in both work and family spheres (Russo et al. [in press](#)).

Yet only a handful of studies have examined transformational leadership in the work-family or health context. Using an aggregated sample from China, Kenya, and Thailand, Wang and Walumbwa (2007) found that when employees perceived leaders as more transformational and when work-family programs were available, they reported higher levels of organization commitment and lower levels of work withdrawal. Such findings suggest that transformational leadership fosters employee experiences of family supportive supervision by shaping positive perceptions of access to work-family resources. Hammond et al. (2015) drew on a subset of items related to manager work-family support that were derived from a larger work-family climate scale (Thompson et al. 1999). They found that transformational leadership was associated with lower work-family conflict and higher work-family enrichment. However, both of these studies used same-source cross-sectional employee data and did not consider that transformational leaders might engage in FSSB to help alleviate work-family conflict or provide enriching resources. Overall, this review suggests:

Hypothesis 1: Transformational leadership (TL) is positively related to family-supportive supervisor behaviors (FSSB), such that employees who have supervisors reporting higher TL will experience higher levels of FSSB.

Family Supervisor Supportive Supervisor Behaviors & Time-Lagged Employee Outcomes

The time-lagged implications of work resource support have been under-examined (Ten Brummelhuis and Bakker 2012). We theorize that the effects of support on health and performance may not always show up simultaneously, as support resources may need to be accessed, accumulated, and used over time. Thus, there may be a lagged effect on individual outcomes. Most previous research has focused on same-source cross-sectional links between work-family conflict and negative health consequences (Allen and Armstrong 2006). We examine lagged relationships between employees' perceptions of FSSB and (a) health, (b) job outcomes, and (c) performance ratings.

FSSB and Physical Health Reviews suggest that psychosocial factors at work such as social support act as a buffer to protect the onset of health problems and disease by providing a resource to help employees cope with demands (Uchino 2006). Research has shown a link between the workplace social environment in which job tasks are performed and reports of work-related physical pain (USBJD 2008). Further, a study of healthcare workers found a positive correlational relationship between FSSB and sleep, a key health outcome (Crain et al. 2014). Given this research, we expect that individuals who perceive higher levels of FSSB will experience psychological benefits that will protect them from later reports of physical health problems (as it will take time for positive perceptions of support to influence health attitudes and behaviors).

FSSB and Mental Health Studies have found that conflict and lack of balance in the work-family sphere are positively related to depression and poor mental health (Frone et al. 1996; Haar et al. 2014). Yet there is limited evidence as to whether FSSB has a direct impact on mental health. Matthews et al. (2014) found that FSSB was positively related to subjective well-being, but this relationship was mediated through work engagement. Similarly, numerous studies have documented a negative relationship between FSSB and work-family conflict (e.g., Hammer et al. 2009; Kossek et al. 2011) and a positive relationship between healthy behaviors such as getting enough sleep (Crain et al. 2014). From a conceptual standpoint, supervisors who engage in FSSB are more likely to be respectful of subordinates' time away from work, discouraging 24/7 connectivity and allowing subordinates to maintain normal and healthy sleep schedules (Barnes et al. 2016). Given this evidence, we expect to find a positive link between FSSB and employee physical and mental health:

Hypothesis 2a: Employee perceptions of FSSB (Time 1) are related to employee health outcomes (Time 2) such that employees who perceive higher levels of FSSB will report better physical and mental health.

FSSB and Work-Family Conflict Although previous research has demonstrated a positive link between FSSB and reduced work-to-family conflict (WFC), research has often been cross-sectional and also mixed in terms of whether FSSB predicts family-to-work conflict (FWC). For example, a cross-sectional study from Hill et al. (2016) found that teachers who perceived higher levels of FSSB from their school principals reported lower levels of WFC. Other cross-sectional studies show that FSSB was unrelated to FWC among a sample of grocery store employees (Hammer et al. 2009) but was associated with FWC among a sample of information technology employees (Hammer et al. 2013). Similarly, using a diverse sample of multiple professions generated through an alumni database, Greenhaus et al. (2012) found evidence that FSSB was negatively associated with family interference with work. As a recent review shows (Nohe and Sonntag 2014), there has been greater empirical support for the source attribution perspective (WFC is more strongly related to work-related variables) than family-related variables. Given that FSSB is a work-related variable, we expect that FSSB is negatively related to lagged WFC and FWC, although we would expect this relationship to be weaker for FWC given previous mixed evidence.

Hypothesis 2b: Employee perceptions of FSSB (Time 1) are related to work-family conflict (Time 2) such that employees who perceive higher levels of FSSB will have lower levels of WFC and FWC.

FSSB and Work Outcomes Scholars argue that employees will tend to respond to FSSB by exhibiting increased levels of both task and contextual performance (Odeh-Dusseau et al. 2012). Similarly, recent studies have demonstrated a positive relationship between FSSB and cross-sectional (often employee self-report) survey ratings on performance (Aryee et al. 2013; Bagger and Li 2014; Mills et al. 2014;

Odle-Dusseau et al. 2012; Rofcanin et al. 2017). An intervention study by Odle-Dusseau et al. (2016) found that FSSB was associated with improvements in job performance over a 10-month period using self-report supervisor surveys (but not actual performance appraisal data). This is an important distinction as actual performance appraisal data may have higher face validity since it is used for employment decision-making. The current study extends research by using year-lagged actual performance ratings. This is the first study examining links between FSSB and archival organizational HR performance records. We also use lagged data to replicate or extend previous findings which indicate that FSSB is negatively related to turnover intentions (Hill et al. 2016; Odle-Dusseau et al. 2012) and positively related to job satisfaction (Odle-Dusseau et al. 2012). This lagged effect is based on the assumption that it takes time for FSSB to be used as a resource to positively impact employee outcomes and to energize employees to manage task performance and work-life demands.

Hypothesis 2c: Employee perceptions of FSSB (Time 1) will be related to employee work outcomes (Time 2) such that employees who perceive higher levels of FSSB will in turn have higher levels of Human Resource performance ratings, higher job satisfaction, and lower levels of turnover intentions.

Methods

Sample

Participants were drawn from twelve stores from a large Midwestern grocery corporation with three chain brands. The stores were also selected from a ranked list of store revenue performance to include a mix of lower and higher performing stores. Eligible participants were adults who had worked in the company for at least two months prior to Time 1 survey administration. A total of 61 supervisors and 271 employees participated. On average, there were 4.44 employees per each supervisor (standard deviation = 4.72). Supervisor sample characteristics were: 51.7% male, 98.4% White, mean age of 43.6 years, average of 2.4 children, average work week of 44.2 h, organizational tenure of 13.2 years, and an average of 26.2 supervisees. Sample characteristics for employees were as follows: 29.5% male, 92.6% White, mean age of 36.9 years, average of 1.6 children living at home, average work week of 31.3 h, and an organizational tenure of 7.0 years. Two-thirds of the sample had a family income of less than \$40,000 (40% were less than \$25,000) qualifying them as low-income. The U.S. federal poverty level for a family of four with two children is approximately \$21,200 with low-income defined as family income that is less than twice the federal poverty threshold or \$42,400 (Cauthen and Fass 2008).

Procedure

This study uses multi-source survey data with antecedents and outcomes collected nine months apart from 271 grocery store employees and 61 supervisors. Data for the

supervisor's leadership style, employee ratings of their supervisors' FSSB, and control variables and demographics were collected at Time 1 via face-to-face surveys. Nine months later, employees again completed surveys to assess well-being (mental, physical health, WFC, and FWC) and work outcomes (turnover intentions and job satisfaction). A member of the research team also collected Human Resource archival records on performance ratings a year after the Time 1 survey. All participants were recruited by members of a trained research team that offered employees an opportunity to participate in a NIOSH (National Institute for Occupational Health and Safety) research project. Respondents were offered a \$25 participation incentive.

Supervisor Measures (Level-2)

Supervisor Transformational Leadership Style Consistent with some current transformational leadership scholarship (Lanaj et al. 2016) and to circumvent the issue of using same-source data from subordinates for key measures, this scale was based on supervisor self-ratings. We used a 13-item established scale (Avolio et al. 1999) with three facets likely to be associated with FSSB to fit the retail setting (e.g., store instead of organization; associate instead of employee). Charisma/inspiration (items 1–5 below) measures the extent to which the leader reports that they lead by providing confidence in and instill trust from their employees, a focus on store goals and values, and modeling ethical behavior and standards. Intellectual stimulation (items 6–9) measures the extent to which the leader reports they suggest and seek new ways of working effectively. Individual consideration (items 10–13) measures the extent to which the leader reports that they give employees individual attention, teach and coach, and focus on strengths versus weaknesses. The items used are listed using the stem: “When managing my associates, I generally: 1. Model ethical standards. 2. Talk about values. 3. Emphasize the collective mission of our store. 4. Express confidence in employees. 5. Talk enthusiastically to employees. 6. Re-examine my assumptions as needed; 7. Seek different ways of doing things. 8. Suggest new ways of working. 9 Suggest different angles. 10. Give employees individualized attention. 11. Focus on employees' strengths. 12. Teach and coach employees. 13. Differentiate among employees. A 1- 4 scale ranging from “not at all” to “always” was used. Scale reliability was .76.

Control Variables There were two sets of control variables used in analyses. The first set of control variables consisted of three supervisor background variables measured at Time 1: age, gender, and mental health (i.e., the SF-12v2 Health Survey developed by Ware et al. 2002). These are relevant to life stage, work-family experiences, and leader affect. The second set of control variables were store-level dummy variables designed to control for store-level effects: Store Performance and Store Chain. Store Performance was based on several years of financial data of store profitability obtained from company records and was coded 0 = *low performing*, 1 = *high performing*). Store Chain was a variable representing which specific grocery store chains that the store operated under. Since individuals and supervisors are nested in organizational contexts and exposed to different changes over time, it was important to control for organizational effects.

Individual Measures (Level-1)

FSSB (Time 1) Employee perceptions of their supervisors' FSSB were assessed with a 14-item scale (Hammer et al. 2009) at Time 1. A sample item is, "*My supervisor takes the time to learn about my personal needs.*" A 1–5 "*strongly disagree*" to "*strongly agree*" response scale was used. The scale was scored as a unidimensional scale. Reliability for this scale was .95.

Employee Mental Health (Time 2) Mental health was measured by the 6-item Mental Component Summary Scale of the SF-12v2 Health Survey (Ware et al. 2002). The raw scales were transformed into a normed scale ranging from 0 to 100 following instructions from the U.S. manual, with higher scores indicating better mental health functioning. A sample item is: "As a result of any emotional problems, have you accomplished less than you would like?" The mean score was 50.85, with a standard deviation of 9.87. Since this variable's score is a population-weighted composite score, there is no alpha reliability, but it is an internationally validated measure of mental health.

Employee Physical Health (Time 2) Employee physical health was measured using the 6-item Physical Component Summary Scale of the SF-12v2 Health Survey (Ware et al. 2002). The raw scales were transformed into a normed scale ranging from 0 to 100 following instructions from the U.S. manual, with higher scores indicating better physical health functioning. A sample item is: "As a result of any physical problems, have you accomplished less than you would like?" The mean score was 51.19 with a standard deviation of 8.42. Scores were reverse-coded such that higher levels of the construct indicated better physical health.

Employee Work-Family Conflict (Time 2) Work-to-family conflict was measured with a five-item scale (Netemeyer et al. 1996). A sample item is: "*The demands of my work interfere with my family life.*" A 1 to 5, *strongly disagree* to *strongly agree* response scale was used. Reliability was .89.

Employee Family-Work Conflict (Time 2) Family-to-work conflict was measured with a five-item scale (Netemeyer et al. 1996). A sample item is: "*The demands of my family interfere with my work-related activities.*" A 1 to 5, *strongly disagree* to *strongly agree* response scale was used. Reliability was .81.

Employee Job Performance Rating (Time 2) Employees were rated on competencies related to categories such as Team Player, Customer Focus, and Open to Change. A record of employee job performance ratings was obtained from actual company Human Resource Information system records about a year after the initial survey. Performance ratings were the annual ratings of employee performance by their direct supervisor given on a 1 to 5 scale (representing an overall score, as the competencies were not rated individually) with the following labels: 1 = Greatly Not Meeting Expectations, 2 = Not Meeting Expectations, 3 = Meeting Expectations, 4 = Exceeding Expectations, 5 = Exemplary Performance.

Employee Job Satisfaction (Time 2) Job satisfaction was measured with a three-item scale (Hackman and Oldham, 1975). A sample item is: “*Generally speaking, I am very satisfied with this job.*” A 1 to 5, *strongly disagree to strongly agree* response scale was used. Reliability was .80.

Employee Turnover Intentions (Time 2) Turnover intentions were measured using a two-item (Boroff and Lewin 1997) scale. A sample item is: “*I am seriously considering quitting this company for an alternate employer.*” A 1 to 5, *strongly disagree to strongly agree* response scale was used. Reliability was .87.

Statistical Techniques for Nested Work-Family Data

Because data were nested (i.e., employees were nested within supervisor group within store), hypotheses were tested using hierarchical linear modeling (HLM; Raudenbush and Bryk 2002). HLM allows for simultaneous analysis of within- and between-group variance, allowing for the examination of higher level units on lower level outcomes while maintaining the appropriate level of analysis (Hofmann 1997) along with more accurate examination of lower level units on lower level outcomes via random effects models (additional estimation of group-level error variances). This is achieved by taking into account non-independence inherent in nested data. With HLM, one can simultaneously estimate multilevel parameters without sample size distorting the results, as characteristically occurs with ordinary least squares methods.

Following procedures proposed by HLM researchers (Hofmann 1997; Hofmann et al. 2000; Raudenbush and Bryk 2002), we included a preliminary step for all HLM relationships not shown in our result tables. Specifically, we tested null models (i.e., ANOVA models) with no predictor variables to ensure systematic between-group variance, as this is a necessary condition for subsequent HLM models. As for the centering of predictor variables, all psychological constructs (e.g., supervisor perceptions of transformational leadership) were grand mean centered, while all demographic and coded variables were raw-score centered. Though grand mean and raw-score centering procedures produce similar results, using both centering procedures is important to provide meaningful interpretation of our model parameters (Enders and Tofighi 2007; Raudenbush and Bryk 2002). Finally, random-coefficients regression models were estimated to test hypotheses at Level-1 (e.g., employee perceptions of FSSB to employee job performance) and means-as-outcomes regressions were estimated to test cross-level hypotheses from Level-2 to Level-1 (e.g., supervisor transformational leadership style to employee perceptions of FSSB).

Results

Table 1 presents the descriptive statistics and correlation matrix for the variables at the supervisor level (Level-2). Table 2 presents the descriptive statistics and correlation matrix for the variables at the employee level (Level-1). The correlations presented in Table 2 do not take into account non-independence within the data and should be interpreted cautiously when between-group variance is significant.

Table 1 Descriptive statistics & correlations for level-2 supervisor variables including controls

Level-2	M	SD	1	2	3	4	
Supervisor variables							
1	Transformational leadership	3.46	0.32	.76			
2	Mental health	50.90	9.15	.13	–		
3	Age	43.55	9.65	.01	.29*	–	
4	Gender	1.48	0.50	.04	–.13	–.10	–

N = 60. Gender: 1 = male, 2 = female

**P* < .05

Hypotheses 1: Supervisor Transformational Leadership Style and FSSB

As Table 3 shows, Hypothesis 1 was supported as supervisor transformational leadership style was positively and significantly related to employee ratings of FSSB. Overall, supervisors using higher levels of a transformational leadership style were more likely to be perceived by their employees as higher in FSSB ($\gamma = .43, p < .05$) when controlling for the other predictors.

Hypothesis 2A-2C: Well-Being and Work Outcomes

The results for Hypotheses 2A-2C are displayed in Table 4. Hypothesis 2a was partially supported. FSSB (Time 1) was significantly related to mental health at (Time 2) ($B = 2.28, p < .05$), such that employees who reported higher FSSB at time one had higher

Table 2 Descriptive statistics & correlations for level-1 employee (subordinate) variables

Level-1	M	SD	1	2	3	4	5	6	7	8	
Employee variables											
1	FSSB - time 1	3.45	.70	.95							
2	Mental health - time 2	50.85	9.87	.17*	–						
3	Physical health - time 2	51.19	8.42	.00	–.13	–					
4	Work-family conflict - time 2	2.54	.83	–.23**	–.40**	.03	.89				
5	Family-work conflict - time 2	1.92	.49	.04	–.23**	–.05	.41**	.81			
6	Job performance ratings - time 2	3.30	.42	.20*	.16	–.03	–.09	–.14	–		
7	Job satisfaction - time 2	3.42	.76	.33**	.27**	–.02	–.42**	–.27**	.21*	.80	
8	Turnover intentions - time 2	2.45	1.10	–.17*	–.17*	.07	.31**	.22**	–.25**	–.69**	.87

N ranged from 106 to 271. FSSB = family supportive supervisor behaviors

**P* < .05

***P* < .01

Table 3 Analyses of supervisor-level predictors of employee-level fssb perceptions (Hypotheses 1A & 1B)

Employee Perceptions of Family Supportive Supervisor Behaviors (FSSB)		
Fixed Effects	Estimate (SE)	Test Statistic (p-value)
Intercept	3.68 (.73)	5.05 (.00)
Transformational LEadership	.43 (.19)	2.29 (.03)
Control variables		
Supervisor age	-.02 (.01)	-3.48 (.00)
Supervisor gender	-.06 (.12)	-.50 (.62)
Supervisor mental health	-.01 (.01)	-1.56 (.13)
Chain #1 Indicator	-.01 (.15)	-.07 (.95)
Chain #2 Indicator	.07 (.13)	.53 (.60)
Store performance indicator	-.05 (.12)	-.41 (.68)
Random effect		
Residual	.42 (.04)	10.09 (.00)
Variance in intercepts	.05 (.04)	1.34 (.18)

Increase in model fit relative to model with only chain and performance indicators, $\chi^2(5) = 55.22, p < .01$, between supervisor (Level 2) pseudo- $R^2 = .66$ reduction in variance in the intercepts

overall mental health nine months later. However, FSSB at Time 1 was not significantly ($B = -.03, p = \text{n.s.}$) related to (Time 2) employee overall physical health.

Hypothesis 2b was partially supported. FSSB at (Time 1) was significantly negatively related to (Time 2) employee work-to-family conflict ($B = -.26, p < .01$), such that employees who had higher levels of FSSB at time one had significantly lower levels of work-to-family conflict nine months later compared to other employees. FSSB was not significantly ($B = .03, p = \text{n.s.}$) related to (Time 2) family-to-work conflict.

Hypothesis 2c was fully supported. FSSB at Time 1 was related to (Time 2) HR records of job performance ratings ($B = .12, p < .05$), job satisfaction ($B = .36, p < .01$), and turnover intentions ($B = -.26, p < .05$), such that employees reporting higher levels of family supportive supervision at Time 1, showed significantly better job performance, greater job satisfaction, and significantly lower intentions to turnover at Time 2.

Supplemental Mediation Analysis

The results presented above suggest that employees' perceptions of FSSB may play a mediating role between supervisor transformational leadership style and several of the studied employee-level outcomes. This implication is consistent with previous studies, which find other aspects of supervisors' behaviors and supervisor-subordinate relationship dynamics as linkages between leadership style and follower outcomes (e.g., Gottfredson and Aguinis 2017). However, the analyses underlying our results do not provide formal tests to support such conclusions. Therefore, additional analyses were conducted to estimate and test the indirect effects of supervisor transformational leadership style on the study outcomes through employees' perceptions of FSSB using a multilevel (i.e., mixed effects) framework. Because mediation analysis requires controlling for the same control variables in all of the underlying equations modeled,

Table 4 Analyses of Individual-level Employee FSSB Perceptions (Time 1) and Employee Well-being and Work Outcomes (Time 2) (Hypotheses 2A-2C)

Level 1 predictor	H2A (Health Outcomes)			H2B (Work-Family Outcomes)			H2C (Work Outcomes)			Employee Turnover Intentions								
	Employee Health	Physical Health	Family Conflict	Work Conflict	Employee Work-Family Conflict	Employee Performance	Job Satisfaction	Job Satisfaction	Job Satisfaction	Employee Intentions	Employee Intentions	Employee Intentions						
	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>						
Constant	39.54**	8.90	47.98**	12.21	3.69**	9.79	1.76**	7.64	2.90**	13.32	2.27**	6.95	3.46**	6.98				
FSSB	2.28*	2.20	-.03	-.04	-.26**	-2.98	.03	.58	.12*	2.33	.36**	4.74	-.26*	-2.24				
Store Performance Indicator	1.91	1.30	1.64	1.26	-.18	-1.46	.01	.08	.02	.22	.01	.07	-.14	-.87				
Chain #1 Indicator	1.32	.70	.64	.38	-.06	-.35	.06	.61	.11	1.23	-.40**	-2.87	.49*	2.34				
Chain #2 Indicator	.80	.47	1.63	1.09	.11	.74	.06	.73	-.16	-1.86	.01	.05	-.07	-.39				
	$R^2 = .03$			$R^2 = .00$			$R^2 = .07$			$R^2 = .04$			$R^2 = .12$			$R^2 = .04$		

*P < .05

**P < .01

the control variables used in the model reported in Table 3 were added to the models reported in Table 4.

The results of these analyses indicate that supervisor transformational leadership style had a statistically significant and negative indirect effect on employee work-to-family conflict ($AB = -0.13, p = .04, 95\% \text{ CI } [-0.25, -0.01]$) and a statistically significant and positive effect on employee job satisfaction ($AB = 0.15, p = .02, 95\% \text{ CI } [0.02, 0.28]$) through employees' perceptions of FSSB. Although some of the other indirect effects approached statistical significance, none were statistically significant. In particular, there was not a statistically significant indirect effect of supervisor transformational leadership style on employee mental health ($AB = 1.14, p = .08, 95\% \text{ CI } [-0.13, 2.42]$), employee physical health ($AB = 0.25, p = .56, 95\% \text{ CI } [-0.61, 1.12]$), employee family-to-work conflict ($AB = 0.01, p = .57, 95\% \text{ CI } [-0.04, 0.06]$), employee job performance ($AB = 0.04, p = .15, 95\% \text{ CI } [-0.01, 0.09]$), and employee turnover intentions ($AB = -0.11, p = .10, 95\% \text{ CI } [-0.24, 0.02]$) through employees' perceptions of FSSB. These results support the conclusion that employees' perceptions of FSSB play a mediating role between supervisor transformational leadership style and some – but not all – of the employee-level outcomes studied.

Discussion

This study has a number of key contributions. First, although leadership styles for motivating employees play a key influence on employee perceptions in the workplace (Bass et al. 2003), few studies have examined how a transformational leadership style relates to subordinate work-family experiences of support and critical outcomes including performance and mental health. Advancing the field theoretically and empirically, we developed and tested a model to demonstrate that transformational leadership generates resources for employees in the form of FSSB, which in turn have time-lagged implications for key work outcomes (i.e., performance ratings) and well-being (i.e., mental health). Such findings provide evidence that both employees and the company benefit when employees perceive their work-family needs are supported by their leaders.

Second, the study adds to the occupational health field by integrating leadership and work-family research, showing that a transformational leadership style positively influences subordinate perceptions of FSSB. In turn, these positive perceptions of FSSB create a positive work context that has a lingering impact on critical established (e.g., work to family conflict, intention to turnover) and less studied outcomes (e.g., HR performance ratings, mental health). Our study also provides empirical support that adds to work-family theory by suggesting that employees with supervisors who adopt a transformational leadership style are more likely to also provide FSSB (as contextual, work-based resources). While it is generally accepted that leaders are the gatekeepers to formal and informal access to work-family support, relatively little research has been conducted on how general leadership style applies to this gatekeeping role. Simple demographic variables that intuitively might predict FSSB perceptions – like leaders' gender, marital status, or having elder or child dependents – do not seem robust in predicting FSSB. However, our findings indicate that leadership style is a more powerful predictor of FSSB perceptions. Although some research has linked follower outcomes such as work-family conflict to leader-member exchange (Major et al. 2008)

and others have examined general leader supportiveness in relation to work-family/life policy use (Thompson et al. 1999), most research has overlooked how leadership styles generate resources that influence how employees are supported in terms of their work-family needs. Our study demonstrates that transformational leadership enables access to work-family supports, which, in turn, have positive, lingering impacts. This seems like a natural and important progression in the literature that has already identified emotional and instrumental support of employees as critical to outcomes including reduced work-family conflict and increased job satisfaction and retention (Hammer et al. 2009).

Third, as Greenhaus et al. (2012) note, although family supportive supervision does not occur in a vacuum and is a growing concept in occupational health research, prior scholarly work has given limited attention to the conditions that engender this support. This study adds to the literature by showing that when leaders report they use a positive leadership style, this can generate psychological resources for their subordinates (i.e., subordinates' experiences of work-family supportive behaviors). By addressing these linkages, we answer calls to extend work-family and health scholarship with: (a) greater integration of leadership theory (Matthews et al. 2014); (b) more consideration of work-contextual influences (Kossek 2015; Ten Brummelhuis and Bakker 2012); (c) increased use of multi-source, multi-method, and multi-wave data (Casper et al. 2007); and (d) better integration of interdisciplinary outcomes—health, work, and family (Hammer and Sauter 2013).

Fourth, our study adds to theory on FSSB research by suggesting that supervisors who use a transformational leadership style are more likely to provide work-family supportive resources, which enhance employee outcomes. Our approach highlights what has been referred to as a “dual agenda” of fostering (as opposed to trading off) healthy work environments to support productivity and well-being (Rappoport et al. 2002).

Fifth, we address the methodological calls to include more multi-source, multi-level, and multi-time point data (cf. Casper et al. 2007) and expand the range of evidence-based outcomes (e.g., health, work, family, HR performance ratings) in work-family research. Most family supportive supervision studies are based on correlational data linking cross-sectional employee perceptions to self-reported outcomes, or leader and employee perceptions collected at a single time point. This approach has common method variance limitations (Podsakoff et al. 2003) and also doesn't examine longer term health and job implications of leader support.

Sixth, little evidence links family supportive supervision and leadership support to actual human resource data used in employment decision-making like performance appraisal rating records. This is a critical omission as such data is used to make retention, promotion, and pay decisions that affect employees' lives. We address these issues by including multi-source survey data from supervisors and employees, linking them not only to employee health, but also to actual HR performance ratings. In doing so, we extend work by Hammer et al. (2011) who found links between leaders participating in training and FSSB, but overlooked how leadership characteristics directly relate to FSSB (which is critical for understanding what engenders leader support) or key outcomes such as HR records or mental health.

Directions for Future Research

On the basis of the work-home resources model (Ten Brummelhuis and Bakker 2012), we conceptualized FSSB as a contextual support resource provided by

supervisors. Yet future research might also more broadly consider family supportive supervision as a separate – albeit related – form of leadership alongside transformational leadership. From this perspective, future studies can include measures of both general transformational leadership style and work-family specific supportive supervision to investigate whether they have incremental and/or differential effects on employee outcomes, as a meta-analysis shows general support and work-family specific support exerts positive effects in different ways (Kossek et al. 2011). This is important given how relatively little research to date has integrated transformational leadership and family supportive supervision as linked aspects of the work-family context. Although we broke new ground by considering FSSB as a resource generated via transformational leadership, we acknowledge there are other ways to further this integration.

Following the approach set forth by Barling et al. (2002), future research might hone the measure of supervisor transformational leadership style to include several items related to work-family support as part of the individual consideration measures. Barling et al. (2002, p. 419) examined safety-specific transformational leadership, modifying transformational leadership items to reflect a safety context (e.g., “My supervisor talks about his/her values and beliefs about the importance of safety). By extension, future studies might adapt these items to address a family supportive or nonwork context (e.g., “My supervisor talks about his/her values and beliefs about the importance of maintaining a work-life balance.”). Evidence is growing that the availability of work-family policies and benefits are not enough to ensure their use. Employees are more likely to use these policies when they see themselves as working for a transformational leader who actively supports family and personal life. Thus, just like the progression of the organizational climate literature from general climate to more specific climates such as climate for safety or diversity, it may be useful to identify which transformational behaviors are most associated with different forms of FSSB. Future research might draw on positive psychology theory to further identify which aspects of transformational leadership most closely link to specific family-supportive leader behaviors. Intervention studies might also focus on increasing supervisor identification with transformational leadership and its linkages to FSSB.

It also may be that a specific measure of leader transformational behaviors for work-family support for the group collective is needed. That is, studies might look at the subculture contexts in which leaders are seen by nearly all members in their groups as being supportive of the group members’ work-family or work-life needs (e.g., Kossek et al. 2017b). Although *individual* employee work-family identities (Rothbard and Edwards 2003) have been examined as critical to work-family outcomes, the impact of *shared* leadership style preferences and *shared* work-family identities and their relation to positive employee and organizational outcomes have been under-studied. Future research should continue to examine the positive interactions that occur between leaders and subordinates and the resulting development of beneficial leadership and work-family processes that are mutually supported by parties. For example, future research could also explore the affective, cognitive, and behavioral processes underlying resource acquisition for leaders, subordinates and teams. This would be consistent with prior research in the following areas: conservation of resources theory (Hobfoll 2002) which states that resource acquisition can be additive resulting in expanded

personal resources (i.e., resource gain spiral); the link between leader positive style and active leadership behaviors (Michel, Pichler, and Newness 2014); and the well-being benefits of positive leadership on subordinates (Kelloway et al. 2012).

While the lagged association between FSSB and physical health was not significant, the finding that FSSB had a lagged impact on mental health is very important. Workplace violence and stress are on the rise and increasing the degree to which supervisors exhibit FSSB may be a way to improve health and safety on the job (Yragui et al. 2016). It also may be that mental health improves first before physical health and additional repeated measures of physical health might reveal additional lasting effects. Many work-family studies measure work-family conflict (Major et al. 2008) or enrichment (Russo et al., [in press](#)) but overlook psychological health measures used in health research. We believe future research should increase use of the mental health measures used in our study to link the workplace with public health concerns.

Building on the notion that supervisors act as the gatekeepers to formal and informal access to work-family support, future studies can consider how transformational leadership and FSSB might be integrated with other occupational health practices such as wellness and stress reduction interventions and initiatives to increase preventative resources for employee and family health in the work environment. Transformational leadership and FSSB can be linked to investigations regarding how well or how poorly line managers implement occupational health practices and relatedly work-family support initiatives within organizations. Although it is well understood that line managers are the key to successful work-family support initiatives within organizations – and that their actions and implementation efforts are often the difference between successful and unsuccessful implementation efforts – less is understood about what influences the effort they put into these change initiatives.

Implications for Practice

Employers can learn from and apply this study's results in several ways. First, recognizing that supervisors can be powerful change agents for informal supportive work-family cultures, employers should train and socialize supervisors to strive to demonstrate transformational leadership behaviors, including family supportive ones. Our study offers evidence that the impact on employee positive perceptions of FSSB is clearly linked to outcomes that matter for organizational effectiveness and individual performance, health, and well-being. Therefore, organizations may convey to supervisors that they should embrace and communicate an inspirational vision to employees of how the organization values employee success in both work and nonwork spheres. To realize this vision, supervisors should provide individualized consideration of employees' work-life conflicts and actively role model their own work-life management. For example, supervisors should encourage employees to limit their availability and establish boundaries that protect their time at home. Similarly, supervisors should role model the same boundary management behaviors not only for the benefit of subordinates' health and well-being but also for their own.

The lagged relationship between transformational leadership style, FSSB, and individual employee outcomes such as job performance, job satisfaction, turnover, and employee health are very important practical findings. By enabling supervisor

enactment of transformational leadership styles and family supportive behaviors for the long term, organizations gain from improving employee work-life management, health and well-being in what amounts to a transformational dual-agenda approach that benefits employees, supervisors, and the organization and develops over time as the change becomes embedded as a positive work-family culture.

This study suggests that employers need to move away from the current laissez-faire approach to work-family policy implementation where many of the decisions on how to support work and family are left up to determination of the supervisor based on the “needs of the business” for that department. This approach results in greater unevenness in how leaders manage work and family issues in their workgroups. When organizations allow for this wide practice variation, the resulting fragmentation of leader and family support can decrease perceived support for work and family and thus negatively impact multiple employee outcomes.

In sum, this study suggests that supervisors’ use of a transformational leadership style may foster a context in which employees perceive greater family-supportiveness. Bridging practice with research, future studies might focus on developing and testing change initiatives with leaders and their workgroups which include practical skills training to jointly improve transformational leadership style and supervisor FSSB. In this way, organizations may encourage policy and practice innovations that promote learning how to nurture and sustain an effective work-family context. Such approaches may have lasting implications for building workplace contexts that support employee health and performance and leave lasting impressions.

Limitations

Although we build on the family support literature by conceptualizing FSSB as contextual work resources and identify transformational leadership as a key antecedent, every study has limitations that can be improved on in future research. One possible limitation is that we did not consider potential moderating variables between the supervisors’ transformational leadership and FSSB. For example, supervisor age was a statistically significant control variable in our analysis, suggesting that supervisor demographics might be further explored. Accordingly, it may be that some transformational leaders are more adept at providing FSSB and that different individual-based differences account for certain boundary conditions. Moreover, in addition to the possible affective, cognitive, and behavioral processes of leader-follower resource development, future research might examine variables not included in this study such as the role of psychological empowerment, fairness perceptions, and leader-member exchange (Straub, 2012). Further, while our study included lagged data, causal interpretations for our findings are not warranted. Randomized studies involving transformational leadership and FSSB supervisor training are necessary to test the causal pathways theoretically implicated.

Relatedly, the question about causality raises an interesting consideration regarding our measure of performance based on archival HR data. In this organization, performance ratings were done on an annual basis. Thus, unless we timed the surveys to match when employee performances were rated, we would not have been able to control for this exactly at the Time 1 measurement. This stands in contrast to other approaches (e.g., Wayne et al. 2017), which assess employees’ supervisor-rated

performance using survey items at the same time that employee survey data is collected. On the one hand, we argue that it is important to link work-family survey data to HR policy archival data that organizations formally collect and use to make HR decisions. Indeed, it is this data – as opposed to supervisor-based survey data collected by researchers – which is used in making pay and promotion decisions (and ultimately employee and employer legal aspects of the employment relationship). At the same time, however, both sources of data are still based on supervisor ratings and are thus subject to the same biases and idiosyncrasies documented in the performance assessment literature. Therefore, beyond integrating the use of both survey-based and archival HR performance ratings, future studies might attempt to also investigate how FSSB impacts more objective performance-related outcomes like fewer work errors, accidents, and injuries pertinent to occupational hazards.

Despite furthering an understanding of both antecedents and outcomes of FSSB, another potential limitation is that we examined FSSB with a global measure of the construct using all four sub-factors as one scale. However, recent studies have examined specific dimensions. For example, Ferguson et al. (2015) focused specifically on supervisor instrumental support, finding a positive relationship with work boundary flexibility, while Koch and Binnewies (2015) focused on the role modeling behaviors sub-factor. Future research may take a more fine-grained approach to determine if the four sub-dimensions of FSSB – emotional support, instrumental support, role modeling behaviors, and creative work-family management – exert differential effects on the outcomes examined in this study.

Lastly, our effect sizing on our distal results between supervisor leadership assessments and worker FSSB perceptions have relatively modest *p*-values. Yet evaluating effects using *p*-values alone can be misleading if what they mean within the research context is not considered (Breugh 2003; Cortina and Landis 2009). Showing improvement in an outcome by 3% or 7% is clinically or scientifically meaningful and important in the context of the retail setting with low-income workers within the rigor of the randomized field study design (as compared to a cross-sectional design). Since low-income workers are rarely included in these studies, these results matter when taking into account the complex factors in their work and family lives.

Conclusions

Our study addressed two growing streams within occupational health research: transformational leadership and FSSB. Conceptualizing FSSB as a resource which supervisors can provide to their subordinates, we found support for the notion that transformational leaders are more likely to engage in FSSB. This finding suggests that having a supervisor with transformational leadership provides psychological benefits to employees that lead them to perceive greater family supportive supervisory resources. Future research should examine whether the link between transformational leadership and FSSB is determined by the exhibition of a greater number of individualized consideration behaviors. Additionally, we provided non-same source time-lagged evidence that FSSB relates to a variety of positive outcomes, not only those related to health and well-being but also those related to HR performance. Future research should

build on this study in order to understand how leadership styles relate to FSSB over time. Such studies might further identify the specific transformational behaviors that are most closely related to FSSB and concomitant work and health occupational health outcomes at the individual, team, and organizational levels of analysis in order to create munificent, multi-level reinforcing occupational healthy work environments.

Funding This research was partially supported by the Work, Family and Health Network, which is funded by a cooperative agreement through the National Institutes of Health and the Centers for Disease Control and Prevention: National Institute of Child Health and Human Development (Grants U01HD051217, U01HD051218, U01HD051256, U01HD051276), National Institute on Aging (Grant U01AG027669), Office of Behavioral and Social Sciences Research, and National Institute for Occupational Safety and Health (Grant U010H008788). Special acknowledgment goes to extramural staff science collaborator Rosalind Berkowitz King (National Institute of Child Health and Human Development) and Lynne Casper (now of the University of Southern California) for design of the original Workplace, Family, Health and Well-Being Network Initiative. Persons interested in learning more about the Network should go to <https://projects.iq.harvard.edu/wfn/home>.

Compliance with Ethical Standards

Conflict of Interest On behalf of all co-authors, there is no conflict of interest.

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